CLAIMS

1.   A method for displaying information, comprising:

identifying computer-readable service code at a service site, which code, when read by a client computer via a network, causes the computer to display at least one service page containing service information;

selecting at least a portion of the service code for inclusion in a service component containing at least a portion of the service information that corresponds to the selected code;

generating a pointer indicating a location at which the service component is accessible, for inclusion of the pointer in host code accessible to the client computer from a host site, which is separate from the service site and is accessible via the network, the host code, when read by the client computer, causing the computer to display a host page containing host information; receiving at the location an invocation of the pointer by the client computer when the client computer accesses the host page; and

conveying the selected service code to the client computer, such that responsive to the selected service code, the client computer displays the service component on the host page.

2.   A method according to claim 1, wherein the network comprises the Internet, and wherein the service site and host site comprise World Wide Web sites.

3.   A method according to claim 1, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

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4.   A method according to claim 3, wherein the mark-up language comprises Hypertext Mark-up Language (HTML).

5.   A method according to claim 3, wherein selecting the service code comprises adding textual tags to the mark-up language code.

6.   A method according to claim 5, wherein adding the textual tags comprises adding Extensible Mark-up Language (XML) tags.

7.   A method according to claim 6, wherein adding the XML tags comprises inserting an XML tag defining an attribute of the component that can be altered when the component is displayed on the host page.

8.   A method according to claim 3, wherein selecting the service code comprises defining one or more pages of the service code for inclusion in the component by means of an indication external to the one or more pages.

9.   A method according to claim 8, wherein the indication comprises an Extensible Mark-up Language (XML) file.

10.   A method according to claim 8, wherein the indication is given in a database.

11.   A method according to claim 8, wherein defining the one or more pages comprises defining first and second pages for inclusion in the component, wherein the second page is defined by a link on the first page.

12.   A method according to claim 3, wherein conveying the selected service code to the client computer comprises conveying a script command instructing the client computer to insert the service component in the host page.

13. A method according to claim 12, wherein conveying the script command comprises conveying a JavaScript document.write command having the selected service code as an argument.

14. A method according to claim 12, wherein the selected service code comprises instructions in a scripting language for execution by the client computer.

15. A method according to claim 3, wherein the pointer comprises a uniform resource locator (URL).

16. A method according to claim 15, wherein the service component has a state, and wherein receiving the invocation of the pointer comprises receiving a hypertext transfer protocol (HTTP) request specifying the URL and the state of the component.

17. A method according to claim 16, wherein specifying the state of the component comprises inserting information regarding the state in a query portion of the URL.

18. A method according to claim 15, wherein the URL is inserted in textual tag that is included in the host code.

19. A method according to claim 18, wherein the textual tag comprises a script tag.

20. A method according to claim 1, wherein selecting the service code comprises associating with the code an indication of one or more properties of the component that can be altered when the component is displayed on the host page.

21. A method according to claim 20, and comprising defining a skin that specifies a value to be assigned to

at least one of the properties when the service component is displayed on the host page.

22. A method according to claim 21, wherein generating the pointer comprises passing the pointer to multiple host sites for inclusion in the host code of each of the sites, and

wherein defining the skin comprises defining a respective skin for each of the host sites.

23. A method according to claim 21, wherein conveying the selected service code comprises modifying the at least one of the properties in the code conveyed to the client computer responsive to the skin.

24. A method according to claim 20, wherein the host page is one of a plurality of host pages at the host site, including first and second host pages, both including the pointer, and comprising specifying a first value to be assigned to at least one of the properties when the component is displayed on the first host page, and a second value to be assigned to the at least one of the properties when the component is displayed on the second host page.

25. A method according to claim 20, wherein adding the indication of the one or more properties comprises specifying one or more visual properties that can be customized by an operator of the host site.

26. A method according to claim 20, wherein generating the pointer comprises passing the pointer to first and second host sites for inclusion in the host code of each of the sites,

wherein a first value is applied to at least one of the properties when the component is displayed on the

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host page of the first host site, and a second value, different from the first value, is applied to the at least one of the properties when the component is displayed on the host page of the second host site.

27. A method according to claim 26, wherein receiving the invocation of the pointer comprises receiving an indication of whether the client computer received the pointer from the first or the second site, and

wherein conveying the selected service code to the client computer comprises modifying the at least one of the properties in the selected service code conveyed to the client computer responsive to the indication.

28. A method according to claim 1, wherein selecting the service code comprises adding to the code a method for extracting data from the service component for use by the host site.

29. A method according to claim 28, wherein the extracted data relates to a service provided by the service site to a user of the client computer in return for payment.

30. A method according to claim 1, wherein generating the pointer comprises passing the pointer to multiple host sites for inclusion in the host code of each of the sites.

31. A method according to claim 30, wherein the multiple host sites comprise first and second host sites, and wherein receiving the invocation of the pointer comprises receiving an indication of whether the client computer received the pointer from the first or the second site, and

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wherein conveying the selected service code to the client computer comprises modifying the information conveyed to the client computer responsive to the indication.

32. A method according to claim 31, wherein the service component has a state, and the information conveyed to the client computer comprises instance data indicative of the state of the component, and

wherein modifying the information comprises modifying the instance data conveyed to the client computer dependent upon whether the client computer received the pointer from the first or the second site.

33. A method according to claim 30, wherein the service site provides a service to a user of the client computer who interacts with the service site via the network, and

wherein conveying the selected service code of the service code to the client computer comprises enabling the user to procure the service while viewing the host page of any of the multiple host sites on the client computer.

34. A method according to claim 33, wherein the service site provides the service in return for payment.

35. A method according to claim 1, wherein identifying the service code comprises identifying code corresponding to multiple service pages to be included in the service component, including first and second service pages,

wherein selecting the service code comprises selecting first and second portions of the code corresponding respectively to the first and second service pages, the first selected portion comprising a

link from the first page to the second page, and comprising:

receiving an invocation of the link by the client computer while the first page of the service component is displayed on one of the host pages; and

conveying the second selected portion to the client computer responsive to the link, whereby the second page of the service component is displayed on the client computer.

36. A method according to claim 35, wherein the host page is one of a plurality of host pages at the host site, and

wherein conveying the second selected portion comprises conveying the second selected portion such that responsive thereto, the client computer displays the second service page on one of the host pages.

37. A method according to claim 36, wherein the client computer displays each of the first and second pages of the service component in a predefined location on one of the host pages.

38. A method according to claim 36, and comprising specifying one of the host pages to be associated respectively with each of the service pages, such that when one of the service pages is displayed in the service component, it is displayed on the one of the host pages that is associated therewith.

39. A method according to claim 38, wherein specifying the one of the host pages comprises associating the first and second service pages respectively with first and second ones of the host pages, and

wherein conveying the second selected portion comprises, responsive to the invocation of the link, calling for the second one of the host pages to be displayed on the client computer.

40 A method according to claim 39, and comprising modifying the link from the first service page to the second service page so that it links directly to the second one of the host pages.

41. A method according to claim 39, wherein calling for the second one of the host pages to be displayed comprises redirecting the client computer to access the second one of the host pages at the host site.

42. A method according to claim 39, wherein generating the pointer comprises passing first and second pointers to the host site indicating respective locations of the first and second selected portions at the service site, for inclusion of the first and second pointers in the host code of the first and second ones of the host pages, respectively, such that responsive to accessing the second one of the host pages, the client computer invokes the second pointer.

43. A method according to claim 38, wherein identifying the code corresponding to the multiple service pages comprises associating the multiple service pages with respective faces, and

wherein specifying the one of the host pages to be associated respectively with each of the service pages comprises recording, for each of the faces, a corresponding host page.

44. A method according to claim 43, wherein associating the service pages with the respective faces comprises

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associating at least two of the pages with the same one of the faces.

45. A method according to claim 35, wherein the first and second service pages are associated with a process running on the service site, the process having a state, and

wherein conveying the second selected portion comprises conveying instance data indicative of the state of the process.

46. A method according to claim 45, wherein the process is associated with a transaction between the service site and a user of the client computer who interacts with the service site via the network, and

wherein conveying the second selected portion comprises consummating the transaction.

47. A method according to claim 1, wherein generating the pointer to the location at which the service component is accessible comprises generating a pointer to the service site.

48. A method according to claim 1, wherein generating the pointer to the location at which the service component is accessible comprises generating a pointer to a location remote from the service site.

49. A method according to claim 1, wherein the host code is conveyed from the host site to the client computer substantially without passing through the location at which the service component is accessible.

50. A method according to claim 1, and comprising receiving the host code at the location at which the service component is accessible,

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wherein conveying the selected service code comprises conveying both the host code and the selected service code from the location to the client computer.

51. A method of electronic commerce, comprising:

identifying computer-readable service code at a service site offering a service, which code, when read by a client computer via a network, causes the computer to display at least one service component enabling a user of the client computer to procure the service;

generating a pointer indicating a location at which the service component is accessible, for inclusion of the pointer in respective host code accessible to the client computer from each of a plurality of host sites, which are separate from the service site and are accessible via the network, the host code, when read by the client computer, causing the computer to display a respective host page of each of the sites;

receiving an invocation of the pointer by the client computer when the client computer accesses the respective host page of any one of the sites;

conveying the service code to the client computer, such that responsive to the service code, the client computer displays the service component on the respective host page; and

providing the service to the user of the client computer while the client computer displays the respective host page.

52. A method according to claim 51, providing the service comprises providing the service to the user in return for payment.

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53. A method according to claim 51, wherein the network comprises the Internet, and wherein the service site and host site comprise World Wide Web sites.

54. A method according to claim 51, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

55. A method according to claim 51, wherein conveying the service code to the client computer comprises making a determination of which of the host sites the client computer was accessing when the invocation was received, and altering one or more attributes of the service component responsive to the determination.

56. A method according to claim 55, wherein the service provided to the user has a state, and

wherein altering the one or more attributes comprises modifying instance data relating to the state of the service in the component that is conveyed to the client computer.

57. A method according to claim 51, wherein identifying the service code comprises associating with the code a method for extraction of information from the service component for use by the host site.

58. A method according to claim 51, wherein identifying the service code comprises identifying code corresponding to multiple service pages to be included in the service component, including first and second service pages, the first page comprising a link to the second page, and comprising:

receiving an invocation of the link by the client computer while the first page of the service component is displayed on one of the host pages; and

conveying the second service page to the client computer responsive to the link.

59. A method according to claim 58, wherein the respective host page at each of the host sites is one of a plurality of host pages at the host site, and

wherein conveying the second service page comprises conveying the second service page such that responsive thereto, the client computer displays the second service page on one of the host pages of the host site.

60. A method according to claim 59, wherein the service comprises a transaction between the service site and a user of the client computer who interacts with the service site via the network, and

wherein conveying the second service page comprises consummating the transaction.

61. A method according to claim 51, wherein generating the pointer to the location at which the service component is accessible comprises generating a pointer to the service site.

62. A method according to claim 51, wherein generating the pointer to the location at which the service component is accessible comprises generating a pointer to a location remote from the service site.

63. A method according to claim 51, wherein the host code is conveyed from the host site to the client computer substantially without passing through the location at which the service component is accessible.

64. A method according to claim 51, and comprising receiving the host code at the location at which the service component is accessible,

wherein conveying the selected service code comprises conveying both the host code and the selected service code from the location to the client computer.

65. A method for displaying information, comprising:

providing computer-readable host code at a host site, which code, when read by a client computer via a network, causes the computer to display at least one host page containing host information;

inserting in the code of the host page a pointer indicating a location at which a service component is accessible, the service component comprising selected code available at a service site, which is separate from the host site and is accessible via the network, the selected code comprising at least a portion of service code available at the service site, which service code, when read by a client computer accessing the service site via the network independently of the host site, causes the computer to display at least one service page containing service information, at least a portion of which, corresponding to the selected code, is included in the service component;

specifying in the host code a location on the at least one host page for display of the service component; and

passing host code including the pointer to the client computer when the client computer accesses the host page, such that responsive to the pointer, the client computer requests the selected code, and upon receiving the selected code, the client computer displays

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the service component in the specified location on the host page.

66. A method according to claim 65, wherein the network comprises the Internet, and wherein the service site and host site comprise World Wide Web sites.

67. A method according to claim 65, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

68. A method according to claim 67, wherein the pointer comprises a uniform resource locator (URL).

69. A method according to claim 68, wherein inserting the pointer comprises inserting a textual tag including the URL in the host code.

70. A method according to claim 67, wherein the selected code at the service site comprises one or more Extensible Mark-up Language (XML) tags.

71. A method according to claim 65, wherein the selected code comprises an indication of one or more properties of the component that are altered when the component is displayed on the host page, and

wherein providing the host code comprises inserting in the host code a specification of the value of at least one of the properties.

72. A method according to claim 65, and comprising extracting an element of the service information from the service component for use at the host site.

73. A method according to claim 65, wherein the host site is one of a plurality of host sites on which the service component is displayed.

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74. A method according to claim 65, wherein providing the host code comprises providing code corresponding to first and second host pages, and

wherein inserting the pointer comprises inserting a first pointer to a first service page of the service component in the first host page, and inserting a second pointer to a second service page of the service component in the second host page, the first service page comprising a link to the second service page, and

wherein passing the host code comprises passing the code corresponding to the second host page responsive to an invocation of the link by the client computer while the first page of the service component is displayed on the first host page, causing the client computer to display the second service page on the second host page.

75. A method according to claim 65, wherein passing the host code comprises passing the host code from the host site to the client computer substantially without passing through the location at which the service component is accessible.

76. A method according to claim 65, and wherein passing the host code comprises passing the host code to the location at which the service component is accessible, from which location both the host code and the selected service code are conveyed to the client computer.

77. A component server, comprising computer apparatus that is adapted to receive an identification of computer-readable service code at a service site, which code, when read by a client computer via a network, causes the computer to display at least one service page containing service information,

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wherein at least a portion of the service code is selected for inclusion in a service component containing at least a portion of the service information that corresponds to the selected code, and

wherein a pointer is generated indicating a location at which the service component is accessible, for inclusion of the pointer in host code accessible to the client computer from a host site, which is separate from the service site and is accessible via the network, the host code, when read by the client computer, causing the computer to display a host page containing host information,

which apparatus is further adapted to receive via the network an invocation of the pointer by the client computer when the client computer accesses the host page, and to convey data including the selected service code to the client computer over the network, such that responsive to the selected service code, the client computer displays the service component on the host page.

78. A server according to claim 77, wherein the network comprises the Internet, and wherein the server comprises a World Wide Web server.

79. A server according to claim 77, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

80. A server according to claim 79, wherein the mark-up language comprises Hypertext Mark-up Language (HTML), and wherein the selected service code is tagged with Extensible Mark-up Language (XML) tags.

81. A server according to claim 79, wherein the pointer comprises a uniform resource locator (URL).

82. A server according to claim 77, wherein the selected service code comprises an indication of one or more properties of the component that can be altered when the component is displayed on the host page, and

wherein the apparatus is adapted to alter the data conveyed to the client computer responsive to the properties.

83. A server according to claim 82, and comprising a memory, which is adapted to store a skin, which specifies a value to be assigned to at least one of the properties when the service component is displayed on the host page, and wherein the apparatus is adapted to alter the data in accordance with a skin stored by the server.

84. A server according to claim 77, wherein the pointer is passed to multiple host sites, including first and second host sites, for inclusion in the host code of each of the sites, and

wherein the apparatus is adapted receive an indication of whether the client computer is accessing the first or the second host site, and to modify the data conveyed to the client computer responsive to the indication.

85. A server according to claim 84, wherein the indication is contained in the invocation received by the apparatus from the client computer.

86. A server according to claim 77, wherein the service code corresponds to multiple service pages to be included in the service component, including first and second selected portions corresponding to first and second

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service pages, the first selected portion comprising a link from the first page to the second page, and

wherein responsive to an invocation of the link by the client computer while the first page of the service component is displayed on one of the host pages, the apparatus is adapted to convey the second selected portion to the client computer.

88. A server according to claim 77, wherein the apparatus is adapted to operate at the service site.

89. A server according to claim 77, wherein the apparatus is adapted to operate remotely from the service site.

90. A server according to claim 77, wherein the host code is conveyed over the network from the host site to the client computer substantially without passing through the apparatus.

91. A server according to claim 77, wherein the apparatus is further adapted to receive the host code and to convey both the host code and the selected service code together to the client computer.

92. An electronic commerce server, comprising computer apparatus that is adapted to receive an identification of computer-readable service code at a service site offering a service, which code, when read by a client computer via a network, causes the computer to display at least one service component enabling a user of the client computer to procure the service,

wherein a pointer is generated to indicate a location at which the service component is accessible, for inclusion of the pointer in respective host code accessible to the client computer at each of a plurality

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of host sites, which are separate from the service site and are accessible via the network, the host code, when read by the client computer, causing the computer to display a respective host page of each of the sites,

which apparatus is further adapted to receive an invocation of the pointer by the client computer when the client computer accesses the respective host page of any one of the sites, and to convey data including the service code to the client computer, such that responsive to the service code, the client computer displays the service component on the respective host page, so that the service is provided to the user of the client computer while the client computer displays the respective host page.

93. A server according to claim 92, wherein the service is provided to the user in return for payment.

94. A server according to claim 92, wherein the network comprises the Internet, and wherein the server comprises a World Wide Web server.

95. A server according to claim 92, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

96. A server according to claim 92, wherein the apparatus is adapted to make a determination of which of the host sites the client computer was accessing when the invocation was received, and to alter one or more attributes of the service component responsive to the determination.

97. A server according to claim 92, wherein a method for extraction of information from the service component is

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associated with the service code for use by the host site.

98. A server according to claim 92, wherein the service code corresponds to multiple service pages to be included in the service component, including first and second service pages, the first page comprising a link to the second page, and

wherein the apparatus is adapted to receive an invocation of the link by the client computer while the first page of the service component is displayed on one of the host pages, and to convey the second service page to the client computer responsive to the link.

99. A server according to claim 98, wherein the respective host page at each of the host sites is one of a plurality of host pages at the host site, and

wherein the apparatus is adapted to convey the second service page such that responsive thereto, the client computer displays the second service page on one of the host pages of the host site.

100. A server according to claim 99, wherein the service comprises a transaction between the service site and a user of the client computer who interacts with the service site via the network, such that the second service page is displayed to notify the user that the transaction has been consummated.

101. A server according to claim 92, wherein the host code is conveyed over the network from the host site to the client computer substantially without passing through the apparatus.

102. A server according to claim 92, wherein the apparatus is further adapted to receive the host code and

to convey both the host code and the selected service code together to the client computer.
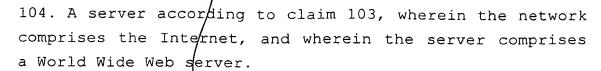
103. A host server, for use at a host site, comprising computer apparatus adapted to store computer-readable host code, which code, when read by a client computer via a network, causes the computer to display at least one host page containing host information,

wherein a pointer is inserted in the code of the host page indicating a location at which a service component is accessible, the service component comprising selected code available at a service site, which is separate from the host site and is accessible via the network, the selected code comprising at least a portion of service code available at the service site, which service code, when read by a client computer accessing the service site via the network independently of the host site, causes the computer to display at least one service page containing service information, at least a portion of which, corresponding to the selected service code, is included in the service component, and

wherein the host code includes a specification of a location on the at least one host page for display of the service component,

which apparatus is further adapted to convey the host code, including the pointer, to the client computer when the client computer accesses the host page, such that responsive to the pointer, the client computer requests the selected code, and upon receiving the selected code, the client computer displays the service component in the specified location on the host page.

104. A server according to claim 103, wherein the network comprises the Internet, and wherein the server comprises a World Wide Web server.

105. A server according to claim 103, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

106. A server according to claim 103, wherein the selected code comprises an indication of one or more properties of the component that are altered when the component is displayed on the host page, and

wherein the host code includes a specification of the value of at least one of the properties.

107. A server according to claim 103, wherein the apparatus is adapted to extract an element of the service information from the service component for use at the host site.

108. A server according to claim 103, wherein the host site is one of a plurality of host sites on which the service component is displayed.

109. A server according to claim 103, wherein the host code corresponds to first and second host pages, and

wherein a first pointer to a first service page of the service component is inserted in the first host page, and a second pointer to a second service page of the service component is inserted in the second host page, the first service page comprising a link to the second service page, and

wherein the apparatus is adapted to pass the code corresponding to the second host page responsive to an invocation of the link by the client computer while the

first page of the service component is displayed on the
first host page, causing the client computer to display
the second service page on the second host page.

110. A server according to claim 103, wherein the
apparatus is adapted to pass the host code from the host
site to the client computer substantially without passing
through the location at which the service component is
accessible.

111. A server according to claim 103, wherein the
apparatus is adapted to pass the host code to the
location at which the service component is accessible,
from which location both the host code and the selected
service code are conveyed to the client computer.

112. A computer software product, comprising a
computer-readable medium in which program instructions
are stored, which instructions, when read by a computer
server, cause the server to receive an identification of
computer-readable service code at a service site, which
code, when read by a client computer via a network,
causes the computer to display at least one service page
containing service information,

wherein at least a portion of the service code is
selected for inclusion in a service component containing
at least a portion of the service information that
corresponds to the selected code, and

wherein a pointer is generated indicating a location
at which the service component is accessible, for
inclusion of the pointer in host code accessible to the
client computer at a host site, which is separate from
the service site and is accessible via the network, the
host code, when read by the client computer, causing the

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client computer to display a host page containing host information, and

wherein the instructions further cause the server to receive an invocation of the pointer by the client computer when the client computer accesses the host page, and to convey data including the selected service code to the client computer, such that responsive to the selected service code, the client computer displays the service component on the host page.

113. A product according to claim 112, wherein the network comprises the Internet, and wherein the computer server comprises a World Wide Web server.

114. A product according to claim 112, wherein the host code and service code comprise code written in a mark-up language, which is read by a browser program running on the client computer.

115. A computer software product, comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer server, cause the server to receive an identification of computer-readable service code at a service site offering a service, which code, when read by a client computer via a network, causes the client computer to display at least one service component enabling a user of the client computer to procure the service,

wherein a pointer is generated indicating a location at which the service component is accessible, for inclusion of the pointer in respective host code accessible to the client computer at each of a plurality of host sites, which are separate from the service site and are accessible via the network, the host code, when

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read by the client computer, causing the client computer to display a respective host page of each of the sites,

which instructions further cause the server to receive an invocation of the pointer by the client computer when the client computer accesses the respective host page of any one of the sites, and to convey data including the service code to the client computer, such that responsive to the service code, the client computer displays the service component on the respective host page, so that the service is provided to the user of the client computer while the client computer displays the respective host page.

116. A computer software product, comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer server at a host site, cause the server to store computer-readable host code, which code, when read by a client computer via a network, causes the client computer to display at least one host page containing host information,

wherein a pointer is inserted in the code of the host page a pointer indicating a location at which a service component is accessible, the service component comprising selected code available at a service site, which is separate from the host site and is accessible via the network, the selected code comprising at least a portion of service code available at the service site, which service code, when read by a client computer accessing the service site via the network independently of the host site, causes the computer to display at least one service page containing service information, a

portion of which, corresponding to the selected code, is included in the service component, and

wherein the host code includes a specification of a location on the at least one host page for display of the service component,

which instructions further cause the server to convey the host code, including the pointer, to the client computer when the client computer accesses the host page, such that responsive to the pointer, the client computer requests the selected code, and upon receiving the selected code, the client computer displays the service component in the specified location on the host page.